Cloud Computing

Beware of the Physical Risks

It's rare that a risk management discussion about cloud computing doesn't focus on cyber security and privacy. Cyber technology emerges quickly and risk managers are understandably focused on implementing the latest security measures and defending against cyber-attacks and other technological threats to their company.

"In risk management, most of the talk about cloud computing centres on privacy and security," said Jim Charron, Practice Leader–Technology for Zurich North America. "But another type of risk looms large, physical damage to data in the cloud and the resulting business interruption."

Here are some weather events that have caused physical damage to the cloud:

- **2012:** Superstorm Sandy shut down data centres in Manhattan, forcing popular media outlets like The Huffington Post®, BuzzFeed and Gawker® to temporarily disable their websites.

- **2012:** Amazon® had two power outages in the span of one month at its Northern Virginia cloud facility. Scores of popular online offerings such as Netflix®, Instagram® and Pinterest® were forced offline.

- **2011:** Microsoft® and Amazon's data centres in Dublin, Ireland, were knocked off line due to lightning strikes and storm activity. It even knocked out the backup generators that were set for use in such an emergency.

- **2009:** Some of Amazon's cloud customers suffered loss of access when some servers where knocked off line by a series of storms.

This increased usage of the cloud presents a unique set of insurance challenges to risk managers who should broaden their focus beyond privacy and security exposure. Weather and other traditional perils should be considered or a key loss scenario would be left unaddressed and possibly uninsured.

How Traditional Coverage can Miss the Mark

The insurance industry has responded to the emergence of cloud computing with robust coverage options for cyber-attacks associated with the cloud. First party cyber coverage options can be found in property forms, Errors & Omissions policies and on a stand-alone basis. Though a few property policies do include affirmative language for these types of exposures, for those that do not, shoe horning cloud exposures into dated language can be problematic and pose uncertain outcomes.

“It’s not like nobody has thought about this risk,” said Charron. “It’s fairly common to see a request to cover a cloud exposure, but sometimes it’s for a coverage that wasn’t a good fit.”

There are a few problems with traditional property coverage. First, traditional property and business income coverage requires damage to an insured’s own property — but they don’t have any property at the cloud facility. They just use the cloud to access their data — and that’s an important distinction. “The insured typically doesn’t own any tangible property at the cloud facility,” said Charron. Other coverage options may be considered such as contingent business income or loss of use coverage, but even those specialized coverages have their problems.

**Optimal Cloud Coverage**

Property coverage hasn’t caught up to the risk of physical perils to the cloud because many insurance providers are still trying to understand how to see the unique risks of cloud computing.

To combat the coverage gaps, Zurich has created “cloud coverage” for their property portfolio, which provides current language designed to address the unique risk associated with using the cloud. Cloud Coverage can provide insurance protection to an insured in the event of a business interruption or extra expense loss if the cloud facility is temporarily off line or no longer able to operate as a result of a covered cause of loss. Additional coverage features include unnamed location option, contractual penalties as well as research-and-development continuing expenses.

**The Takeaway**

Physical perils can cause serious damage to cloud computing but those risks are not always given the same attention as the risks involved with cyber-attacks. Much of the coverage used around such risks isn’t well suited for the exposure.

Big weather events like Superstorm Sandy seem to be happening more frequently these days and risk managers would be prudent to be sure their risk management program contemplates the likelihood of a physical loss to their cloud providers.

If not, they could be in for a loss of data, business income or most importantly, their reputation.

“If a company is using the cloud to simply store data, they may be able to sustain brief downtime without it,” Charron said. “But if they’re using it for critical applications, they could jeopardize their customer relationship, income stream and reputation real quickly.”